IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

      Rodriguez, *et al.*

Serial No.: 09/736,661

Filed: December 14, 2000

Title: System and Method for Adaptive Video
         Processing with Coordinated Resource Allocation

Confirmation No.: 8279

Group Art Unit: 2621

Examiner: An, Shawn S.

Docket No.: A-6280 (191910-1750)

<u>**REMARKS IN SUPPORT OF**</u>
<u>**PRE-APPEAL BRIEF CONFERENCE**</u>

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
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Sir:

      Applicants submit the following remarks in support of a Request for a Pre-Appeal Brief Conference.

REMARKS

Applicants respectfully submit that the Examiner's rejections of the claims in the pending application are clearly in error. The Examiner alleges that scaling video that is stored in memory is the same as scaling video that passes through a device without being stored in memory. This allegation is clearly in error because scaling and storing video in memory is not the same as scaling video in transit to a display device.`

Additionally, the Examiner alleges that applying "CPU constraints" and "bandwidth constraints" by a server is the same as applying constraints at a client DHCT. This allegation is clearly in error because one skilled in the art would understand that a DHCT is **not** a server, but is rather, a client device.

Rejection of Claims

The Final Office Action dated January 3, 2007, rejected the following. Claims 38, 53-54, 71-73, 75-77, and 79-81 have been rejected under §103(a) as allegedly being obvious over *MacInnis et al.* ("*MacInnis*" 6,570,579) in view of *Boyce et al.* ("*Boyce*" 5,614,952) and *Kalra et al.* ("*Kalra*" 5,953,506). Claims 55, 66, 68-70, and 83-84 have been rejected under §103(a) as allegedly being obvious over *MacInnis* in view of *Kalra*. Claims 67, 74, 78, and 82, have been rejected under §103(a) as allegedly being obvious over *MacInnis* in view of *Kalra* and *Boyce*. For purposes of the pre-appeal brief conference, Applicants respectfully traverse these rejections and respectfully submit that clear cases of error exist, supported by the evidence in the record.

A.   Rejection of Independent Claim 38

In the Final Office Action dated January 3, 2007, the Examiner erroneously omits one or more elements needed for a prima facie rejection, namely the proposed combination does not teach "transferring the set of retrieved reconstructed decompressed video data to a display device while downscaling the video picture **in transit** to the display device" or "a method implemented in a **digital home communication terminal**...comprising: determining whether a resource-constrained mode is to be initiated". In other words, claim 38 requires the DHCT to downscale the video picture <u>as it is being sent to the display device</u>, and the determination of initiating a resource constrained mode <u>must be made in the DHCT</u>.

In the Response to Remarks on Page 2 in the Final Office Action dated January 3, 2007, the Examiner states "MacInnis et al discloses transferring the set of retrieved reconstructed decompressed (decoded) video date (Fig. 2, 50) to a display device (abs.; television display;

Fig. 2, Video Out), while downscaling (52; col. 5, lines 65-67; col. 6, lines 1-9) the video picture in transit (52 to 60 to 62 to Video Out) to the display device."

Applicants respectfully disagree, and as discussed in Applicants' response dated October 15, 2006 (pages 7-8), *MacInnis* fails to teach the above-described claim features because *MacInnis* appears to describe a downscaler that stores frames to memory. *Kalra* contains no discussion at all of "downscaling," and *Boyce* refers to downsampling rather than downscaling. Since the proposed combination of *MacInnis* in view of *Boyce* and further in view of *Kalra* does not teach at least the above-described features recited in claim 38 (and dependent claims 71-73), a prima facie case establishing an obviousness rejection has not been made.

Additionally, in the Response to Remarks on Page 3 in the Final Office Action dated January 3, 2007, the Examiner states "the recitation 'A method/(computer readable medium) implemented in a DHCT . . . comparison' has not been given patentable weight because the recitation occurs in the preamble. . .Nevertheless. . .MacInnis et al does not particularly disclose the DHCT comprising determining whether a resource constrained mode is to be initiated. However, Kalra et al teaches a scalable media delivery system, comprising determining whether a resource constrained mode is to be initiated (col. 17, lines 10-55). . ." Applicants respectfully disagree, and as discussed in Applicants' response dated October 15, 2006 (page 9), *Kalra* discloses "CPU constraints" and "bandwidth constraints." However, *Kalra* further discloses that these two steps are applied by the **server** rather than the **client**: "attention is directed to the flowchart in FIG. 15B1 which indicates the steps that the server takes to determine which of the particular streams to transmit" (*Kalra*, Col. 16, lines 50-52). In contrast, claim 38 recites "a method implemented in a digital home communication terminal" such that "determining whether a resource-constrained mode is to be initiated" is performed by the DHCT.

The Examiner admits that "*MacInnis et al.* does not seem to particularly disclose determining whether a resource constrained mode is to be initiated." Finally, Applicants find no discussion of "a resource-constrained mode" in the last reference, *Boyce.* Therefore, since the proposed combination of *MacInnis* in view of *Boyce* and further in view of *Kalra* does not teach at least the above-described features recited in claim 38 (and dependent claims 71-73), a prima facie case establishing an obviousness rejection has not been made.

B.   Rejection of Independent Claims 53 and 54

Although Applicants believe claims 53 and 54 to be patentably distinct from each other, the clear errors in rejecting similar elements for these two claims are presented in this section to

facilitate review. In the Final Office Action dated January 3, 2007, the Examiner erroneously omits one or more elements needed for a prima facie rejection, namely the proposed combination does not teach "transferring the retrieved set of decoded pictures to a display device while scaling the pictures <u>in transit</u> to the display device to a second spatial resolution <u>without storing the pictures in the memory component</u>" as recited in claim 53 or "logic configured to transfer the set of decoded pictures to a display device while scaling the pictures in transit to the display device to a second spatial resolution without storing the pictures in the memory component" as recited in claim 54. In other words, claims 53 and 54 require the DHCT to downscale the video pictures as they are being sent to the display device, and without storing the pictures in memory.

In the Response to Remarks on Page 3 in the Final Office Action dated January 3, 2007, the Examiner states ". . .MacInnis et al further discloses passthrough video including digital or analog video that is *not captured in memory*, and that the video scaler may perform downscaling of digital video and analog video data as needed (col. 5, lines 43-44 and lines 65-66), which clearly implies/meets transferring. . ., downscaling the video picture in transit to the display device to a second spatial resolution *without storing the pictures in the memory component*."

Applicants respectfully disagree, and as pointed out in Applicants' response dated October 15, 2006 (pages 7-8 and 9-10), *MacInnis* (col. 6, lines 2-8, emphasis added) recites, "With both analog and digital video input, either one may be scaled while the other is displayed **full size** at the same time **as passthrough video**. Any portion of the input may be the source for video scaling. To conserve memory and bandwidth, the video scaler preferably **downscales** before **capturing video frames to memory** and **upscales** after **reading from memory**, but preferably does not perform both upscaling and downscaling at the same time." In other words, it appears that *MacInnis* teaches that downscaling is performed on the video frames and then they are captured to memory, and upscaling is performed on video frames that are read from memory. However, the only video input that is passthrough video (not stored in memory) is displayed <u>full size</u>. Full size video is <u>not</u> scaled video. Thus, <u>*MacInnis* does not disclose any scaled video as passthrough video.</u> As noted above, neither *Kalra* nor *Boyce* disclose this feature. Therefore, since the proposed combination of *MacInnis* in view of *Boyce* and further in view of *Kalra* does not teach at least the above-described features recited in claims 53 and 54 (and dependent claims 75-77 and 79-81), a prima facie case establishing an obviousness rejection has not been made.

4

C.   Rejection of Independent Claims 55 and 66

Although Applicants believe claims 55 and 66 to be patentably distinct from each other, the clear errors in rejecting similar elements for these two claims are presented in this section to facilitate the review. In the Final Office Action dated January 3, 2007, the Examiner erroneously omits one or more elements needed for a prima facie rejection, namely, the proposed combination does not teach "transferring the retrieved video data to a display device while downscaling the video picture in transit to the display device" as recited in claims 55 and 66 for reasons similar to those discussed in connection with claim 38 above. Therefore, since the proposed combination of *MacInnis* in view of *Kalra* does not teach at least the above-described features recited in claims 55 and 66 (and dependent claims 83-84 and 68-70), a prima facie case establishing an obviousness rejection has not been made.

CONCLUSION

Favorable reconsideration and allowance, or the re-opening of prosecution on the merits, of the present application and claims 38, 53-55, and 66-82 are hereby courteously requested.

Respectfully submitted,

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